

Amendments to the Claims

Claims 1-105 (Cancelled)

Claim 106. (Previously Presented) A method of introducing protein in a mammal which comprises delivering to a blood vessel in the mammal a transformed vascular cell, the transformed cell originating from the mammal or being syngeneic to the mammal and comprising an exogenous nucleic acid encoding the protein and competent to express the protein when implanted in the mammal.

Claim 107. (Previously presented) The method of claim 106 wherein the transformed cell becomes attached to the wall of the vessel in the mammal.

Claim 108. (Previously Presented) The method of claim 106 wherein the transformed cell is an endothelial cell or a smooth muscle cell.

Claim 109. (Previously Presented) The method of claim 106 wherein the exogenous nucleic acid encodes a therapeutic agent.

Claim 110. (Previously Presented) The method of claim 106 wherein the recombinant protein is competent to induce angiogenesis.

Claim 111. (Previously Presented) The method of claim 106, wherein the recombinant protein is competent to induce revascularization.

Claim 112. (Previously Presented) The method of claim 106 wherein the protein is useful in the treatment of an ischemic organ.

Claim 113. (Previously Presented) The method of claim 112 wherein the organ is a heart, liver, bowel, kidney or brain.

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Claim 114. (Previously Present d) The method of claim 106, wherein the protein is competent to improve vascular or cerebrovascular circulation.

Claim 115. (Currently Amended) A method of treating a human patient comprising the step of site-specific instillation of transformed cells into the patient, wherein the cells originate from the patient or are syngeneic to the patient and are selected from the group consisting of endothelium, smooth muscle, and parenchymal cells.

Claim 116. (Previously Presented) The method of claim 115, wherein the cells produce protein in the patient.

Claim 117. (Previously Presented) The method of claim 116, wherein the protein is secreted by the cells.

Claim 118. (Previously Presented) The method of claim 116, wherein the protein has a therapeutic effect.

Claim 119. (Previously Presented) The method of claim 118, wherein the protein is an angiogenic factor.

Claim 120. (Previously Presented) The method of claim 116, wherein the protein is a gene product of a marker gene.

Claim 121. (Previously Presented) The method of claim 115, wherein cells are genetically altered *in vitro* prior to being instilled to the patient.

Claim 122. (Previously Presented) The method of claim 115, wherein the cells are instilled into a body vessel within the patient.

Claim 123. (Previously Presented) The method of claim 122, wherein the vessel is a blood vessel.

Claim 124. (Previously Presented) The method of claim 122, wherein the cells are instilled intravenously.

Claim 125. (Previously Presented) The method of claim 124, wherein the cells are instilled with a catheter.

Claim 126. (Previously Presented) The method of claim 125, wherein the catheter comprises a balloon means.

Claim 127. (Previously Presented) The method of claim 126, wherein the balloon means comprises two spaced apart inflatable members.
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Claim 128. (Previously Presented) The method of claim 127, wherein the balloon means further comprises an instillation port positioned between the inflatable members.

Claim 129. (Previously Presented) The method of claim 126, wherein the balloon means further comprises an inflatable member near the distal end of the catheter.

Claim 130. (Previously Presented) The method of claim 129, wherein the balloon means further comprises an instillation port proximal to the inflatable member.

Claim 131. (Previously Presented) The method of claim 122, wherein the cells are instilled surgically.

Claim 132. (Previously Presented) The method of claim 122, wherein the cells are instilled percutaneously.

Claim 133. (Previously Presented) The method of claim 122, wherein the cells are instilled by high pressure instillation.

Claim 134. (Previously Presented) The method of claim 122, wherein the cells are instilled by injection into the patient.

Claim 135. (Previously Presented) The method of claim 134, wherein the injection occurs in a capillary bed.

Claim 136. (Previously Presented) The method of claim 115, wherein the cells are instilled to treat a cardiovascular disease.

9
Claim 137. (Previously Presented) The method of claim 136, wherein the cardiovascular disease is ischemic cardiomyopathy.

Claim 138. (Previously Presented) The method of claim 115, wherein the cells are instilled into the heart.

Claim 139. (Previously Presented) The method of claim 115, wherein the cells are instilled into the kidney.

Claim 140. (Previously Presented) The method of claim 115, wherein the cells are instilled into the bowel.

Claim 141. (Previously Presented) The method of claim 115, wherein the cells are instilled into the liver.

G. O'Neill Claim 142. (Previously Presented) The method of claim 115, wherein the instillation occurs at an angioplasty site following an angioplasty procedure.
